

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: H. Takeda et al. : Art Unit:
Serial No.: To Be Assigned : Examiner:
Filed: Herewith :
FOR: DATA TRANSMITTING APPARATUS, :
DATA RECEIVING APPARATUS AND DATA :
TRANSMISSION CONTROL APPARATUS :

Continuation of:

Applicant: H. Takeda et al. : Art Unit: 2732
Serial No.: 09/586,915 : Examiner:
Filed: June 5, 2000 :
FOR: DATA TRANSMITTING APPARATUS, :
DATA RECEIVING APPARATUS AND DATA :
TRANSMISSION CONTROL APPARATUS :

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

SIR:

Prior to examination, please amend the above-identified application as follows:

IN THE SPECIFICATION:

After the title, please rewrite the first paragraph to read as follows:

--THIS APPLICATION IS A CONTINUATION APPLICATION OF APPLICATION SERIAL NO. 09/586,915, FILED JUNE 5, 2000, WHICH IS A CONTINUATION APPLICATION OF APPLICATION SERIAL NO. 08/945,629, FILED APRIL 23, 1998, WHICH IS BASED UPON PCT/JP96/01123 FILED APRIL 25, 1996.--.

IN THE DRAWINGS

Please delete the last three (3) sheets of figures, also labeled as "Notations".

IN THE CLAIMS:

Please cancel claim 1 - 23. Please add the following new claim:

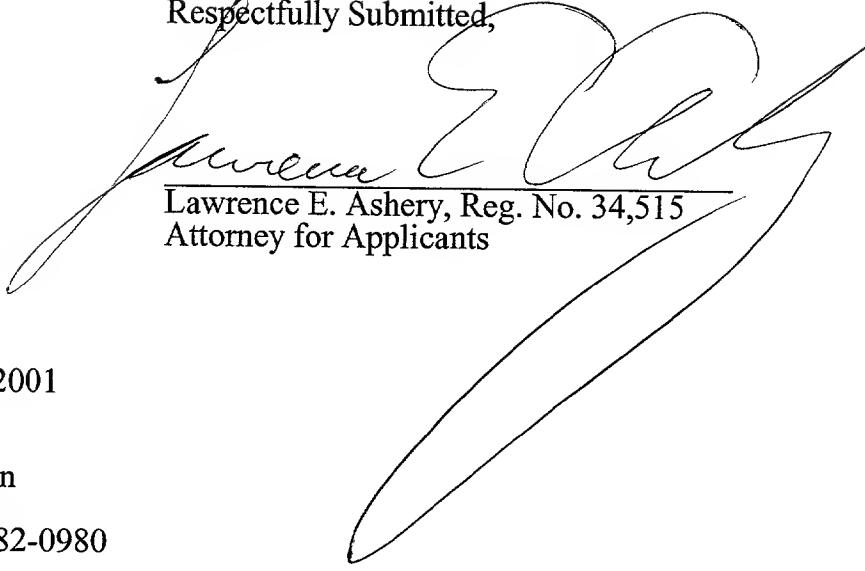
1 24. (Newly Added) Apparatus for transmitting data on a transmission
2 medium, comprising:

3 propagation delay identifier storage means for storing a propagation delay
4 identifier which is used for bandwidth allocation;

5 maximum data size storage means for storing a maximum data size value
6 which corresponds to maximum size of data included in a packet transmitted on
7 said transmission medium; and

8 a pathway coupled between a) a further apparatus and b) said maximum
9 data size storage means so that said maximum data size value is writable by a
10 further apparatus.

Respectfully Submitted,


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LEA/lm/b
Dated: November 29, 2001

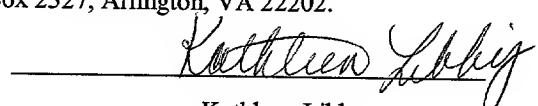
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Kathleen Libby

VERSION WITH MARKINGS TO SHOW CHANGES MADESPECIFICATION:

Specification at page 1, line 4:

THIS APPLICATION IS A CONTINUATION APPLICATION OF
APPLICATION SERIAL NO. 09/586,915, FILED JUNE 5, 2000, WHICH IS A
CONTINUATION APPLICATION OF APPLICATION SERIAL NO.
08/945,629, FILED APRIL 23, 1998, WHICH IS BASED UPON
PCT/JP96/01123 FILED APRIL 25, 1996.

CLAIMS:

Claims 1-23 have been canceled.

Claim 24 has been added.

WHAT IS CLAIMED:

1. (Amended) A data transmitting apparatus, wherein
said data transmitting apparatus is a transmitting apparatus
acquiring a part of the bandwidth of a communication medium before
5 transmission and transmit it and comprising:

bandwidth detection means for detecting a bandwidth of data
inputted to said transmitting apparatus;

necessary bandwidth calculation means for calculating a
necessary bandwidth for said communication medium from said bandwidth
10 outputted from said bandwidth detection means;

transmission condition judge means for comparing an acquired
bandwidth acquired from said communication medium with said necessary
bandwidth outputted from said necessary bandwidth calculation means and
judging if said necessary bandwidth exceeds said acquired bandwidth;

15 transmission control means for outputting said data only while
the judge result outputted from said transmission condition judge means
indicates that said necessary bandwidth does not exceed said acquired
bandwidth and stopping said data output while the judge result outputted
from said transmission condition judge means indicates that said necessary
20 bandwidth exceeds said acquired bandwidth; and

transmission means for transmitting said data outputted from
said transmission control means to said communication medium.

2. (Amended) A data transmitting apparatus as recited in claim 1,
25 comprising:

bandwidth information adding means for adding a bandwidth
outputted from said bandwidth detection means to the data outputted from
said transmission control means as bandwidth information and outputting
only said bandwidth information while said data is not supplied from said
30 transmission control means; and wherein

said transmission means transmits said data added with said
bandwidth information outputted from said bandwidth information adding

means or said bandwidth information to said communication medium.

3. (Amended) A data receiving apparatus comprising:

reception means for occupying a part of the bandwidth of a
5 communication medium and for receiving transmission information
transmitted only while the bandwidth of data to be transmitted does not
exceed the acquired bandwidth and stopped to transmit said data while it is
indicated that said necessary bandwidth exceeds said acquired bandwidth,
from said communication medium;

10 transmission stop detection means for inputting said data
received at said reception means and detecting that said transmitting
apparatus stops transmission by detecting that said data does not arrive for
a designated period; and

15 processing means for processing to correspond according to the
detection result detected at said transmission stop detection means.

4. A data receiving apparatus as recited in claim 3,

wherein:

20 said processing means directs to stop a recording action to a
recording apparatus to record the received data when said transmission stop
detection means detects that said transmitting apparatus stops
transmission.

5. A data receiving apparatus as recited in claim 3,

25 wherein:

said processing means directs to stop a reproducing action to a
reproducing apparatus to reproduce the received data when said
transmission stop detection means detects that said transmitting apparatus
stops transmission.

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6. (Amended) A data receiving apparatus comprising:

reception means for receiving said data sent from a transmitting

apparatus acquiring a part of the bandwidth of a communication medium before transmission, transmitting said data added with bandwidth information while the bandwidth of data to be transmitted does not exceed the acquired bandwidth and receiving transmission information which stops 5 outputting said data added with the bandwidth information when said data bandwidth exceeds the acquired bandwidth and transmits only said bandwidth information, from said communication medium;

transmission stop detection means for inputting said data received at said reception means and detecting that said transmitting 10 apparatus stops transmission of said data by detecting that said data does not arrive for a designated period and only bandwidth information arrives;

bandwidth information separation means for inputting said data received at said reception means and added with said bandwidth information and separating and outputting said bandwidth information 15 added from said data; and

processing means for processing to correspond according to the detection result detected at said transmission stop detection means and at least one of said bandwidth information separated at said bandwidth information separation means.

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7. A data receiving apparatus as recited in claim 6,
wherein:

said processing means directs to stop a recording action to a recording apparatus to record the received data when said transmission stop 25 detection means detects that said transmitting apparatus stops transmission.

8. A data receiving apparatus as recited in claim 6,
wherein:

30 said processing means directs to stop a reproducing action to a reproducing apparatus to reproduce the received data when said transmission stop detection means detects that said transmitting apparatus

15. (Deleted)

16. (Amended) A data transmitting apparatus comprising:
measurement means for measuring a data size arriving during a

5 designated fixed period;

bandwidth determination means for determining a transmission bandwidth from the data size measured at said measurement means; and

transmission means for transmitting according to the transmission bandwidth determined at said bandwidth determination means; and wherein

10 said bandwidth determination means adds a data size with a designated rate for the data size measure at said measurement means and determines a transmission bandwidth according to the data size obtained by said addition.

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17. (Amended) A data transmitting apparatus comprising:
measurement means for measuring a data size arriving during a designated fixed period;

bandwidth determination means for determining a transmission bandwidth from the data size measured at said measurement means; and

transmission means for transmitting according to the transmission bandwidth determined at said bandwidth determination means; and

wherein

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said measurement means measures a data size by counting the number of packets having a fixed length arriving during a designated fixed period.

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18. A data transmitting apparatus comprising:

judge means for judging if the transmission packets which a receiving apparatus receives from a transmission route passes the timing to be outputted from said receiving apparatus;

35 a counter for counting up the value when a transmitting apparatus sends one of said transmission packets and counting down the value when said judge means judges that each of said transmission packets passes the timing to be outputted from said receiving apparatus;

determination means for determining a transmission timing of each of said transmission packets so that said counted value does not exceed a fixed value; and

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transmission means for transmitting said data according to the transmission timing determined at said determination means.

19. A data transmitting apparatus comprising:
transmission time stamp for generating transmission time stamp